

Application No.: 10/026,961
Amendment dated February 28, 2006
Reply to Office Action dated September 28, 2005

Docket No.: 8733.524.00-US

AMENDMENTS TO THE DRAWINGS:

The attached sheets of drawings include changes to FIG. 8. These sheets replace the original sheet including FIG. 8 and add FIGs 8A-8D to clarify the subject matter of the present application.

Attachment: Replacement Sheets
Annotated Sheets Showing Changes

REMARKS

The Examiner is thanked for the thorough review and consideration of the present application. Additionally, Applicants thank the Examiner for the courtesies extended to Applicants' representative during the personal interview conducted on January 11, 2006. The Office Action dated September 28, 2005 has been received and its contents carefully reviewed. The amendments and remarks in this paper are in accordance with the comments discussed during the interview on January 11, 2006.

By this Response, claims 1, 6, 15 and 19 have been amended, and replacement drawings (FIGs. 8A-8C) are submitted to provide further clarification of the recited invention. No new matter has been added. Claims 1-22 are pending in the application with claims 10-14 being withdrawn from consideration. Reconsideration and withdrawal of the objections and rejections in view of the above amendments and following remarks are requested.

In the Office Action, claims 5, 19 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants kindly elect not to rewrite these claims to independent form at this time to permit the Examiner to reconsider in the objections in view of the amendments and remarks presented in this Paper. Withdrawal of the objection is respectfully requested.

In the Office Action, the drawings are objected to under 37 CFR 1.83(a) with regard to the limitation "wherein the storage electrode is directly connected to the pixel electrode on an entire surface of the second region of the storage electrode" (claims 1, 6 and 15). Applicants file herewith replacement drawing sheets, FIGs. 8A-8D, which clarify the subject matter recited in independent claims 1, 6 and 15 in accordance with discussions with the Examiner on January 11, 2006 and the amendments presented in this paper. Withdrawal of the objection is respectfully requested.

Claim 19 is objected to because of informalities. Applicants have amended claim 19. Accordingly, the objection is overcome. Withdrawal of the objection is requested.

In the Office Action, claims 6-9 are rejected under 35 U.S.C. § 102(a) as being anticipated by Applicants' Related Art (hereafter "ARA"). Applicants respectfully traverse the rejection because ARA fails to teach or suggest each and every feature recited in the claims of the present application. In particular, ARA fails to teach or suggest a liquid crystal display device that includes, "the pixel electrode completely covering an upper surface and side edges of the storage electrode, wherein the storage electrode is directly connected to the pixel electrode on an entire surface of the second region of the storage electrode" as recited in independent claim 6 of the present application.

Because ARA fails to teach at least this feature of independent claim 6, claim 6 and its dependent claims 7-9 are allowable over ARA. Reconsideration and withdrawal of the rejection are respectfully requested.

In the Office Action, claims 1-4, 6-8 and 20 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,091,466, issued to Kim, et al. (hereafter "Kim '466"). Applicants respectfully traverse the rejection because Kim '466 fails to teach or suggest each and every feature recited in the claims of the present application. Specifically, Kim '466 fails to teach or suggest a liquid crystal display device that includes, "a storage electrode having a first region overlapping the gate line to form a storage capacitor, a second region offset from and parallel to the gate line, and a third region at respective ends of the storage electrode;... wherein the storage electrode is directly connected to the pixel electrode on an entire surface of the second region of the storage electrode" as recited in independent claim 1 of the present application.

Kim '466 discloses "the pixel electrode 141 also connects to the storage capacitor electrode 151 through the storage capacitor contact hole 181, as shown in FIG. 5F". Applicants respectfully note the storage electrode of the present application is directly connected to the pixel electrode (i.e., no contact hole) on an entire surface of the second region of the storage electrode. Kim '466 fails to teach each of these features of claim 1. As such, Kim '466 fails to anticipate claim 1, and claim 1 and its dependent claims 2-4 and 20 are allowable over Kim '466.

Kim '466 also fails to teach or suggest a liquid crystal display device that includes "the pixel electrode completely covering an upper surface and side edges of the storage electrode, wherein the storage electrode is directly connected to the pixel electrode on an entire surface of the second region of the storage electrode", as recited independent claim 6 of the present application.

Because Kim '466 fails to teach or suggest these features of claim 6, Kim '466 does not anticipate claim 6. Accordingly, claim 6 and its dependent claims 7 and 8 are allowable over Kim '466.

Reconsideration and withdrawal of the rejection of claims 1-4, 6-8 and 20 are respectfully requested.

In the Office Action, claims 15-18 and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim '466 in view of U.S. Patent No. 6,262,784, issued to Kim (hereafter "Kim '784"). Applicants respectfully traverse the rejection because neither Kim '466 nor Kim '784, analyzed alone or in any combination, teaches or suggests the combined features recited in the claims of the present application. For example, Kim '466 and Kim '784 fail to teach or suggest a liquid crystal display device that includes, "a storage electrode having a first region over the gate line, a second region offset from and parallel to the gate line, and a third region at respective ends of the storage electrode;... wherein the pixel electrode directly connects to the storage electrode on an entire surface of the second region", as recited in independent claim 15 of the present application.

The Office Action concedes on pages 8-9 that Kim '466 "does not explicitly disclose a second substrate with a liquid crystal layer between the first and second substrates." To remedy the alleged deficient teachings of Kim '466, the Office Action relies upon FIG. 3 of Kim '784. Based FIG. 3 of Kim '784, the Office Action concludes that "it would have been obvious to the ordinary artisan at the time the invention was made to modify the invention of Kim '466 for the purpose of obtaining a fully functional liquid crystal display device." Applicants respectfully disagree.

Applicants submit that even if the teachings of Kim '784 were used to modify Kim '466 (which Applicants do not concede there is proper motivation to do), the resulting device would still fail to provide the combined features recited in the claims of the present application. Specifically, the resulting device would fail to provide "the pixel electrode directly connects to the storage electrode on an entire surface of the second region" as recited in independent claim 15 of the present application. Because the combination of Kim '466 and Kim '784 fail to teach at least this feature of claim 15, claim 15 and its dependent claims 16-18 and 22 are allowable over any combination of Kim '466 and Kim '784. Reconsideration and withdrawal of the rejection are respectfully requested.

In view of the above, each of the presently pending claims in this application is in condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding objection and rejections of the claims and to pass this application to issue. If the Examiner deems that a telephone conversation would further the prosecution of this application, the Examiner is invited to call the undersigned (202) 496-7500.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to Deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Dated: February 28, 2006

Respectfully submitted,

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ANNOTATED SHEET

FIG.8A

